# THE ROLE OF E-GOVERNMENT SERVICES ON INTENTION TO USE WITH MEDIATOR EFFECT OF CITIZENS' SATISFACTION IN THE UAE

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**DEDICATION**

I dedicate this thesis to my first teacher "my dear mother" for her constant encouragement. To "my beloved father" for his unlimited support who made me a successful and distinguished person. I will not forget what you did for me.

## ACKNOWLEDGEMENT

# ABSTRACT

Intention to use E-Government services by citizens of United Arab Emirates (UAE) considered as vital element in the use of E-Government services. Previous studies were not focused on citizens' intention to use E-Governmnet services hence, has highlighted the high need of the intention to use E-Government services and its indicators including service quality, system quality, information quality and cost to enhance the citizens' intention to use E-Government services. The aim of this research is to empirically examine the citizens' intention to use E-Government services in traffic police department in UAE. Moreover, this study identified the theoretical issues related to E-Government services and citizens intention to use E-Government with citizen's satisfaction. The aim of the proposed conceptual framework is to determine the role of E-Government towards citizens' intention to use, along with citizens satisfaction as mediator in UAE. In addition, the study utilizes citizen's satisfaction as mediating variables in the effect of service quality, system quality, information quality and cost towards intention to use E-Government services. A well-structured questionnaire were used and also validates the proposed conceptual framework using a quantitative approach with the data collected from 380 respondents from the users of E-Government services of traffic police department. This study is carried out through an empirical review of literature and development of hypotheses therefore all of the hypothesis including mediator's hypothesis of the formulated framework were proved to be positive and supported. The findings suggest that E-Government services including service quality, system quality, information quality and cost has a significant positive impact on intention to use E-Government services. This study finds that citizens' satisfaction is a mediator between service quality, system quality, information quality and cost in order to enhance citizen's intention to use E-Government services. This study will help UAE government to improve intention to use E-Government services; this influence can affect in the context of traffic police departments of the UAE. Further, researcher of this work attempts to develop a conceptual and empirically tested framework with service quality, system quality, information quality, and cost and citizens' satisfaction as mediators.

# ABSTRAK

Hasrat untuk menggunakan perkhidmatan E-Government oleh warga UAE dianggap sebagai elemen penting dalam penggunaan perkhidmatan E-Gov. Kajian terdahulu tidak tertumpu kepada niat rakyat untuk menggunakan perkhidmatan eGovernmnet justeru, telah menekankan keperluan yang tinggi terhadap niat untuk menggunakan perkhidmatan E-Government dan petunjuknya termasuk kualiti perkhidmatan, kualiti sistem, kualiti maklumat dan kos untuk meningkatkan hasrat rakyat untuk menggunakan perkhidmatan E-Kerajaan. Matlamat penyelidikan ini adalah untuk mengkaji secara empirikal niat rakyat untuk menggunakan perkhidmatan E-Kerajaan di jabatan polis trafik di UAE. Selain itu, kajian ini mengenal pasti isu-isu teori berkaitan perkhidmatan E-Government dan niat rakyat untuk menggunakan E-Gov. dengan kepuasan rakyat. Matlamat rangka kerja konseptual yang dicadangkan adalah untuk menentukan peranan E-Gov. terhadap hasrat rakyat untuk menggunakan, bersama-sama dengan kepuasan rakyat sebagai pengantara di UAE. Di samping itu, kajian ini menggunakan kepuasan rakyat sebagai pembolehubah pengantara dalam kesan kualiti perkhidmatan, kualiti sistem, kualiti maklumat dan kos terhadap niat menggunakan perkhidmatan E-Kerajaan. Soal selidik yang tersusun dengan baik telah digunakan dan juga mengesahkan rangka kerja konseptual yang dicadangkan menggunakan pendekatan kuantitatif dengan data yang dikumpul daripada 380 responden daripada pengguna perkhidmatan E-Gov. jabatan polis trafik. Kajian ini dijalankan melalui kajian empirikal literatur dan pembangunan hipotesis oleh itu semua hipotesis termasuk hipotesis pengantara bagi rangka kerja yang dirumuskan terbukti positif dan disokong. Dapatan kajian menunjukkan bahawa perkhidmatan E-Gov. termasuk kualiti perkhidmatan, kualiti sistem, kualiti maklumat dan kos mempunyai kesan positif yang signifikan terhadap niat untuk menggunakan perkhidmatan E-Government. Kajian ini mendapati bahawa kepuasan rakyat merupakan pengantara yang positif antara kualiti perkhidmatan, kualiti sistem, kualiti maklumat dan kos bagi meningkatkan hasrat rakyat menggunakan perkhidmatan E-Gov. Kajian ini akan membantu kerajaan UAE untuk meningkatkan niat untuk menggunakan perkhidmatan E-Kerajaan; pengaruh ini boleh menjejaskan dalam konteks jabatan polis trafik UAE.

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# CHAPTER 1

# INTRODUCTION

## 1.1    Introduction

The current study examined the impact of E-Government services including service quality, system quality, information quality, system quality and cost on intention to use E-Government in traffic police of United Arab Emirates. The traffic police department of a country is always a much-highlighted part because the importance for implantation of strategies that are very important to control and facilitate its citizens to fulfil and their need and wants and maintain the for peace in the country. Thus, the impact of E-Government on citizens' intensions to use E-Government in traffic police of UAE has been tested empirically by collecting the data from citizens who are directly involved in using E-Government. The background of the study explained after the introduction and then discussed the problem statement which is aligned with objectives and research questions. In addition, the significance of the study, research scope, organisation of research, and lastly the summary of the chapter were stated in this chapter.  The introduction gives a brief idea of the complete thesis. The purpose of this research was to investigate and discover the impact of E-Government services on improving intention to use E-Government services Abu Dhabi, United Arab Emirates (UAE).

## 1.2    Background of the study

The E-Government is noteworthy because of it minimizes the corruption rate, enhances transparency, increases convenience, increases gross domestic product

(GDP) growth, allows a way for citizens to be involved directly with their country, reduces overall costs, and broadens the spread of a government. The E-Government is a common way of conducting government across the globe. More implementing of E-Government means ease of use of governmental services for citizens, enhancing governmental service delivery, simplifying compliance of governmental laws for citizens, improving citizen engagement and trust in public, decreasing fraud and improving cost efficiency for the government.

The Golf countries making the great examples on implementation of E-Government especially, United Arab Emirates, is one of the great examples of how E-Government established, implemented, and progressed with a citizens' service-based concept. The UAE is ranked 26th globally and second in the Middle East for its E-Government strategies (Mishra & Geleta, 2020). The Emirate's leadership, symbolised as Sheikh Rashid Al Maktoum as the Crown Prince of Abu Dhabi, and his visionary persistence to make lofty ideas a reality, may be credited almost entirely to the E-Government initiative that continues to evolve in Dubai. Sheikh Rashid Al-Maktoum promoted the concept of launching a visionary E-Government project in the Middle East in 1999, and it was a right step.

The researchers in the literature concerning to eGovernmant suggested that the E-Government in United Arab Emirates is not without challenges as it has a lot that requires the improvements (Rashid, Islam, Asif, & Ahmer, 2019). There are many areas that require the intentions from practitioners and scholars to be highlighted to bring more betterment and improvements by bringing innovative solutions.

The extensive literature review of the related field and recommendations of practitioners illustrates that the citizens' intentions to use E-Government is acquiring a high intentions from the scholars to learn more to bring a better framework for its citizens (Alahmed, 2018). While the creation and implementation of the E-Government project in Dubai at a rapid pace, so the purpose to conduct this research is to explore the gap and try to fill the excited gap while exploring practical viable solution a significant degree, a brilliant work in progress (Sachan, Kumar, & Kumar, 2018). Mishra & Geleta (2020) global assessment of E-Government delivery shows that progress is being made globally in the implementation of E-Government ideals.

The E-Government is now a hot topic and a new phenomenon for study in UAE (Lean, 2008). The core of moving into E-Government, is about changing the interaction between people and businesses with government. It only makes sense to find out what they fancy, expect, don't want, and worry about (Kaisara & Pather, 2009). In UAE, E-Government and its progress is not just communication between UAE population citizen with government and government with government, it is however "viewed as a way to transform and improve the political, economic, and social relationship that citizens and government can have with one another" (Odile Sallard, 2007).

The UAE government and authorities realized that for them to be able to have a successful E-Government progress, the managers in the government agencies should be able to deal with E-Government challenges in an effective manner (Lee, Joon, & Ahn, 2011). There are two levels of government in the UAE: federal and municipal. Each of the seven emirates has its own structure: Dubai, Abu Dhabi, Sharjah, Ajman, Ras Al-Khaimah, Umm Al-Quwain, and Al-Fujaira. Local governments is officially responsible for controlling and managing the local economic resources, which in turn contribute to the federal budget. Abu Dhabi and Dubai, both wealthiest emirates contributing up to 90% of the annual budget (Westland & Al-khouri, 2010). The federal budget funds the public sector for transformation into digitalization, including the ministries, municipalities, and all other responsible bodies like hospitals, the military, the police, sports, transportation, education and telecommunications (Westland & Al-Khouri, 2010).

In 2005 the idea of a connecting the citizens with a large segment of government is quickly becoming a reality and capturing the markets around the world (Al-Jenaibi, 2016). Transformation happening in United Arab Emirates is marked by its speedy installation of upgraded modern infrastructure, implementation of new technology and resources to swiftly roll out change the mind set of general population to adopt new technologies.

The purpose of this study was to determine the role of intention to use E-Government through service quality, system quality, information quality and cost (Danila & Abdullah, 2014). While taking citizens' satisfaction as mediator to examine the mediating impact in this relationship (Alketbi, 2018). This examination is primarily based on a synthesis of government publications available through the e-government

portal https://www.moi.gov.ae/en/, where examples of the E-Government exercise are available, with other accounts of the Dubai E-Government project.

To understand the secret behind progressing E-Government in United Arab Emirates it is worthwhile to highlight the results of United Nations' E-Government survey issued a report entitled UN E-Government survey 2019 that compares the E-Government situation of different countries and clearly illustrates the increasing trend of eGovernmnet users and increase in revenues motivates the management to bring innovations in order to facilitate and capture market. The E-Government inclination index, which includes three sub-indexes termed infrastructure index, web measure index, and human capital index, was created to track trends. Abu Dhabi is the UAE's capital and the country's largest emirate, accounting for 87 percent of the country's total land area (Westland & Al-khouri, 2010). As a result, while the UAE has a federal political structure and local government independence, each emirate is responsible for managing its natural resources, debts and can  plays a significant role in federal government duties such as defence, police, and UAE foreign policy (Ministry of Economy, 2019).

Sheikh Maktoum has taken new initiatives and is giving E-Government implementations in the United Arab Emirates a lot of thought. This is in line with the sheikh's smart-government initiative, which is to create a government that never sleeps and works 24/7, 365 days a year, is as welcoming as hotels, and is simple in its procedures (Kelly & Stansfield, 2013). "Looking forward to being a centre of government where excellence is no longer our goal, but pioneering work through a paradigm shift in Dubai Government services at all levels in line with the directives of the UAE's supreme leadership, and making unprecedented historical achievements for the public service in a manner that satisfies the public," Sheikh Hamadan Bin Mohammad said (Kelly & Stansfield, 2013).

A thorough examination of the academic literature reveals a plethora of articles and reports on E-Government in the United Arab Emirates, merely highlighting that most research on the topic is fairly generic and limited to that which focuses on how E-Government can assist and what positive outcomes can be achieved through E-Government (Id, Jauregui, & Id, 2020). Meanwhile, when it comes to technology preparedness and infrastructure development, the UAE is ahead of the pack in the Gulf

Cooperation Council and the Middle East and North Africa. It is at the forefront and trailblazer in implementing modern technology to improve and augment government services (Westland & Al-khouri, 2010).

The top management of the United Arab Emirates envisions the country as one of the world's leading nations, and they have clearly plotted their strategy with a strong emphasis on improving the effectiveness and efficacy in order to become socially responsible and sustainable, and improving systems and processes to become more efficient, robust, and agile.

The United Arab Emirates E-Government Gateways www.moi.gov.ae and es.adpolice.gov.ae/trafficservices is the official website and it is operated by Abu Dhabi traffic police department to facilitate citizens. Over this website citizens can enjoy the following E-Government services traffic portal services, add or release mortgage services, transfer vehicle ownership, create driving file ownership, traffic fine payment, issue 'to whom it may concern' concerns, driving license services, traffic fines archive, and retrieve the value of violations paid, the remaining period of the withdrawn licenses, view traffic profile, applications status inquiry, traffic profile's receipts, update traffic profile (Government & Development, 2020). The above services provided by the traffic police department through E-Government to citizens of Abu Dhabi still need improvements and have gap to fulfil the citizens in order to achieve their satisfaction level. Current studies from literature highlight the growing needs of this sector of E-Government of traffic police (Mishra & Geleta, 2020).

The government of Abu Dhabi has been making significant attempts to develop a proper framework for the development of E-Government. Dubai, which is one of the emirates in the UAE, started this service in 1999 to modernise government services delivery through new channels and formally launched it in 2001. The government intends to achieve a virtual government by providing high-quality customer focused service. The E-Government index, developed by United Nation, Division for Public Economics and Public Administration (UN-DPEPA), ranks four Arab countries including UAE, Kuwait, Bahrain and Lebanon in the category of high E-Government capacity and five Arab countries including Saudi Arabia, Qatar, Jordan, Egypt and Oman in the category of medium E-Government capacity, suggesting that there is a great potential for Arab countries to improve their E-Government index performance.

The E-Government in United Arab Emirates is a pioneering initiative in the Arab World aims at integrating individually automated government departments under the single umbrella of the E-Government initiative, thus empowering employees across lines of businesses and levels of government, and facilitating the lives of citizens and customers of the government (Alketbi, 2018).

This study looks into the topic of determining citizens' intentions to use E-Government while mediating it with citizens' satisfaction. Although the government and corporations are the primary beneficiaries of E-Government, it is important not to overlook the role of individuals, who save cost from E-Government in a variety of ways (Sachan *et al*., 2018). Citizens can use E-Government to obtain a wide range of information and services, including research, government forms and services, employment and business opportunities, public policy information, voting information, licence registration, tax filing, renewal, fine payment, and submission of comments to government officials (Shuib, Yadegaridehkordi, & Ainin, 2019).

One of the drawn conclusions is that the technology is not which makes e-Government work, but the citizens. Unfortunately, there are still many people who cannot access to computers and internet due to lack of knowledge and accessibility (Alahmed, 2018). Government, on the other hand, has the potential to improve citizen satisfaction towards government by effectively employing information and technologies, particularly the internet (Sachan *et al* 2018). This improved line of information technologies guarantees that government is more accessible and insures that the services are delivered in a more convenient manner (Alahmed, 2018). Citizen satisfaction towards E-Government is linked to citizens' perceptions of online service convenience, information reliability, security and electronic communication involvement (Faizan & Zaidi, 2017).

According to Yousif *et al* (2020) saving of cost and time is one of most notable advantages of E-Government which is not only important for citizens but also more concerned factor for businesses. Despite the fact that the usage of E-Government technologies is rapidly increasing in the world's economic and production systems, Pozon-Lopez *et al*., (2020) feel that they are still not "off the shelf.

Despite the fact that the usage of E-Government technologies is rapidly increasing in the world's economic and production systems that they are still not off the shelf

(Darbok, 2012). According to Denis (2019) in case E-Government is to truly alter government in terms of citizen participation and engagement, then E-Government must be citizen-entered in its development and implementation," says the report. In Abu Dhabi, United Arab Emirates, this study looked into the role of E-Government in fostering public trust and mediating citizen satisfaction. To investigate empirical correlations between defined variables in this study, all customers of E-Government users of traffic police department services were deemed respondents.

### 1.2.1 The E-Government

The E-Government gives a new perspective to this world and plays a vital role in making citizens lives easy active and mobile. Majority of the countries around the globe continuously working to successful implementing E-Government services in order to give easy access to its citizens. The Countries that are successfully implemented and practicing E-Government services currently paying intention to improve its processes and procedures as much as user friendly. Numerous studies highlighted the issue of reluctance of citizens in intention to use E-Government services even in developed countries like United Arab Emirates. Literature of previous studies calls to scholars and practitioners for more studies towards the factors influencing the intention to use E-Government especially in United Arab Emirates.

Citizens are considered at the core of government services and formulation in decision-making objectives and functions, according to the suggested E-Government model. Citizens' primary concern under this paradigm is receiving government services as quickly and efficiently as possible. The key concern of E-Government's and concentration is on residents and businesses, and it aspires to have the most extensive connection with people, organisations, government offices, workplaces, representatives, and various governments, all the more correctly and helpfully.

The E-Government services given to its citizens has different difficulties that are not being easy to understand, quick, reasonable, solid, and straightforward (Mensah, 2020). The facts and figures which of eGiverment services and intention to use E-Government through citizen's satisfaction illustrates the high demand of implementations of upgraded technology. In any instance, a few requirements must be

met, including a fully effective E-Government service system, open associations, ease of use, and accessibility to all necessary data. With the aforementioned requirements in place, E-Government will be able to improve services and reutilization viability, allowing citizens and organisations to receive better services (Farida, Setiawan, Maryatmi, & Juwita, 2020).

E-government implementation in developing countries is confronted with many barriers which require winning strategies in order to successfully implement the projects Kassen, (2022); Majumdar and Pujari, (2021); Qaid, (2021) proposed weaknesses in governance systems, ineffective political structures, lack of requisite technical skills, proficiency and weak implementation capacity, ineffective information provision and access, poor infrastructure, a non-conducive policy environments and legislations.

The fundamental aspect of e-government is that it must deliver public information and services in ways that citizens and businesses want them using internet and other information technologies as enablers. Thus, E-Government serves as a platform of infrastructure that governments today are building to transform the way they fulfil their missions, values and aspirations. This should have direct impact on the effectiveness of user's services and governments' continuous contacts with citizens, especially those living in remote areas (Almotawkel & Qureshi, 2021; AlSuwaidi & Moonesar, 2021). Winning strategies are therefore, needed for successful implementation of E-Government. Fundamental to successful E-Government project its acceptability and use by citizens in order to achieve success in E-Government, the government stakeholder commitment, strategic guide and conducting assessment should be on high (Al-Obthani & Ameen, 2019). The priorities and prerequisites must be to ensure that E-Government reaches all the citizens regardless of geographic dispensations, economic, social and political status, age, language, or access to Internet. People with low income, women, youth, disabled, disadvantaged and those living in rural areas should systematically benefits from newer technologies.

The review of literature in this chapter highlights the overview of discussion and origin, purpose of implementation and the value to both citizens and government stakeholders. In the decade of action for the implementation of the 2030 agenda for sustainable development, science, technology and innovation hold the potential to

break through some of the most complex challenges facing the world today (Qaid, 2021). Digitalization in the public sector provides opportunities to support the achievement of the 2030 Agenda and the sustainable development goals (SDGs), including by enhancing the efficiency and effectiveness of public service delivery and by reaching those left behind.

Indeed, recent experience suggests that deploying E-Government in support of good governance generally is essential for building effective, accountable and inclusive institutions at all levels, as called for in Goal 16, and for strengthening the implementation of Goal 17. To capitalize on the power of modern technologies, growing numbers of United Nations Member States are accelerating the digital transformation of governance and public administration (Papadomichelaki & Mentzas, 2012).

Despite the fact that E-Government research has barely been active for a decade, there have been many research papers published on a wide range of topics (Karamipour *et al*., 2015; Manoharan & Ingrams, 2018). The E-Government research focuses on E-Government technology, infrastructure, and resources, as well as socio-economic concerns like access and the digital divide, policies and strategies, user behaviour and intents, and cultural difficulties. Academics, on the other hand, have discovered a scarcity of research on government intentions to use E-Government and the elements that impact citizens' behaviour.

The preceding table shows that the data for online transactional services trends and data until 2020. Apart from South Sudan, it demonstrates that all countries have national portals and backend systems that streamline basic administrative activities, strengthen government service availability, and enhancing accountability and accountability in the public sector (Economist & Unit, 2017; Government & Development, 2020). From 140 in 2018 to 162 in 2020, the number of nations that offer at least one online transactional service increased by 16 percent. (See Table 2.1 for more information.) Furthermore, the use of online services like as building permits, driver's licences, and personal identification cards surged by 100 to 150 percent.

According to the figure above, 162 of the 193 countries examined offering an online transactional services that is a 30 percent growth (37 new countries) over the previous year. Applying for government jobs and company licences, getting birth, death, and marriage certificates, and paying for utilities are the next most popular online services around the world. Submitting a change of address online is the least common technique, with only 66 countries enabling it.

The admirable step is a collaborative engagement under the initiatives, Dubai E-Government announced the e-Citizen Certification Program during Gitex 2004. The programme aims to raise awareness of Dubai E-Government online services and their use among UAE companies and individuals. Candidates will receive an e-Citizen Certificate from Dubai E-Government after completing the course and tests. The implementation of this certification in Abu Dhabi's police department would assist citizens by increasing their understanding of E-Government services. Government campaigns and efforts will encourage citizens to use more e-government services and save money. As a result, the current study places a high value on E-Government.

The digital economy does not describe a new industry. Rather it describes the economic contribution to all industries made by digital technologies such as cloud computing, mobile devices, machine learning, and others. At the heart of the digital economy is a new generation of services. In the digital world, the traditional distinction between products and services no longer applies. Digital "services" include transactions that are carried out entirely online, such as making a purchase on an ecommerce site, as well as products consumed entirely online, such as online games.

Led by the rise of digital services, between 2016-20 the global digital economy will expand by more than 25%, in total, outpacing the non-digital economy's growth of 10%. First, owing to increased mobile penetration, which will reach more than 70% by 2020, second, total revenue generated by mobile apps has reached more than double by 2020, almost USD 80bn. Third the global e-commerce sales has also reached more than USD 4trn.
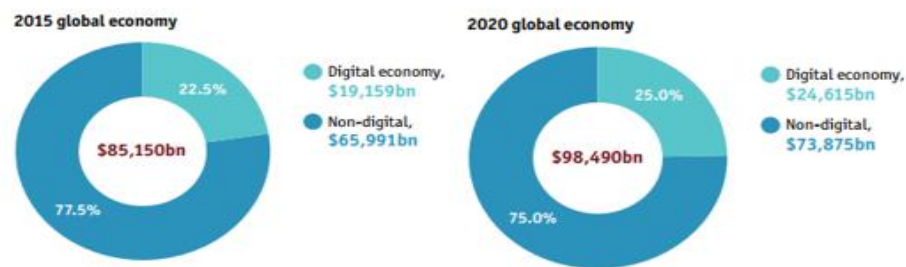
Figure 2.1: Digital Economy Performance

*(Accenture, 2020)*

### 1.2.2 UAE's Digital Economy Growth

A recent Mckinsey study estimated that the UAE's digital economy accounts for just 4.3% of GDP, compared with 6.2% in Europe and 8% in the US, and that the country is capturing only 16% of its "digital potential". Notably, ecommerce in the UAE accounted for just 4% of retail sales in 2015, compared with almost 15% in the UK.



Note. Europe includes France, Germany, Italy, Sweden, United Kingdom.
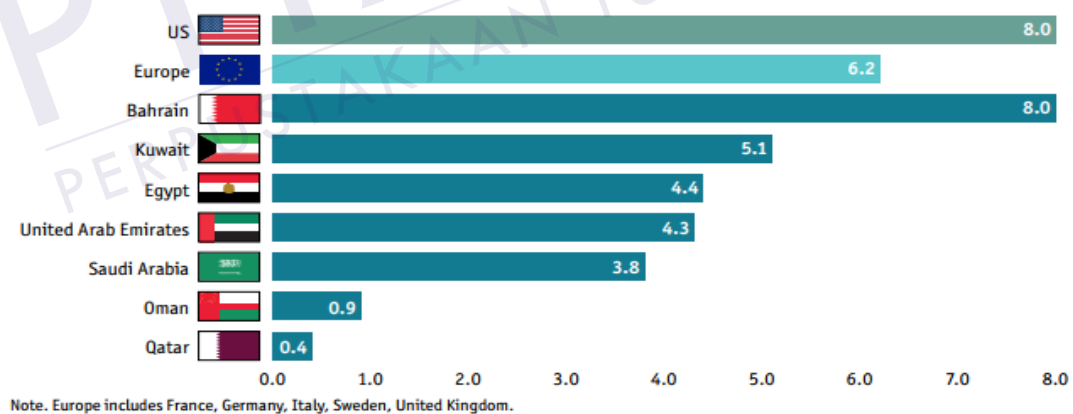
Figure 2.2: UAE Digital Economy Growth Comparison

*(Mckinsey, 2020)*

However, demand for digital services among the UAE public is high, and so there is scope to expand the country's digital economy substantially. 85% of the country's population have at least one mobile phone, a world-leading rate. The average UAE user spends just over four hours per day on their phone, and estimates suggest that

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# VITA

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